

TAUCH ET AL. -- 09/704,725
Client/Matter: 021123-0274355

I. AMENDMENT TO THE CLAIMS

1. (Canceled).
2. (Currently Amended) ~~A~~ An isolated and purified plasmid capable of autonomous replication in bacteria of the genus *Corynebacterium*, said plasmid comprising:
 - i) at least one region that encodes a protein involved in a biosynthetic pathway selected from the group consisting of L-lysine and pantothenic acid;
 - ii) at least one DNA replication region obtained from one of the plasmids pTET3 or pCRY4, and
 - iii) at least one region that encodes a protein for antibiotic resistance comprising a gene selected from the group consisting of a gene encoding a protein conferring tetracycline resistance, a gene encoding a protein conferring streptomycin and spectinomycin resistance, and a gene conferring sulfamethoxazole resistance, wherein said genes are obtained from the antibiotic resistance region of plasmid pTET3, as set forth in Figure 5.
- 3.-5. (Canceled).
6. (Currently Amended) ~~A~~ An isolated and purified plasmid capable of autonomous replication in bacteria of the genus *Corynebacterium* containing:
 - i) at least one DNA replication region obtained from one of the plasmids pGA1, pGA2, pTET3 or pCRY4, and
 - ii) at least one region encodes a protein for antibiotic resistance comprising a gene selected from the group consisting of a gene encoding a protein conferring tetracycline resistance, a gene encoding a protein conferring streptomycin and spectinomycin resistance, and a gene conferring sulfamethoxazole resistance, wherein said genes are obtained from the antibiotic resistance region of plasmid pTET3, as set forth in Figure 5.
- 7.-14. (Canceled).

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15. (Currently Amended) The isolated and purified plasmids of claim 2 or 6, wherein said plasmids are capable of autonomous replication in bacteria of the species *Corynebacterium glutamicum*.

16. (Currently Amended) The isolated and purified plasmid of claim 6, wherein said plasmid consists of the DNA replication region obtained from pTET3 and at least one antibiotic resistance gene obtained from the antibiotic resistance gene region of plasmid pTET3, as set forth in Figure 5.

17. (Allowed) Plasmid vector pSELF3-1, which has a length of 7.0 kbp and the restriction map depicted in Figure 6.

18. (Previously Presented) The plasmid of claim 6, wherein said plasmid comprises the DNA replication region of plasmid pGA1 and the tetA gene, imparting tetracycline resistance obtained from the antibiotic resistance region of plasmid pTET3.

19. (Allowed) Plasmid vector pSELF1-1, which has a length of ~ 7.3 kbp and the restriction map depicted in Figure 7.

20. (Allowed) An isolated plasmid, designated pTET3, wherein said plasmid is characterized by:

- i) a length of ~ 27.8 kbp and the restriction map shown in Figure 1,
- ii) a replication region comprising the nucleotide sequence shown in SEQ ID NO:1, and
- iii) an antibiotic resistance region, shown in Figure 5, consisting of a tetA gene imparting tetracycline resistance, an aadA gene imparting streptomycin and spectinomycin resistance and a sulI gene imparting sulfamethoxazole resistance.

21. (Currently Amended) The plasmid pTET3 of claim 20, wherein said plasmid is compatible with plasmid pCRY4 ~~characterized by:~~

- ~~i) a length of ~ 48 kbp and the restriction map shown in Figure 2,~~
- ~~ii) a replication region comprising the nucleotide sequence shown in SEQ ID NO:4, and~~

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iii) ~~deposited in *Corynebacterium glutamicum* under DSM number 5816.~~

22. (Currently Amended) The plasmid pTET3 of claim ~~21~~ 20, wherein said plasmid is compatible with one or more of the plasmids selected from the group consisting of pGA1, pGA2, pAG3, pBL1, and pHM1519.

23. (Allowed) An isolated plasmid, designated pCRY4, wherein said plasmid is characterized by:

- i) a length of ~ 48 kbp and the restriction map shown in Figure 2, and
- ii) a replication region comprising the nucleotide sequence shown in SEQ ID NO:4.

24. (Canceled).

25. (Currently Amended) The isolated plasmid pCRY4 of claim ~~24~~ 23, wherein said plasmid is compatible with one or more of the plasmids selected from the group consisting of pGA1, pGA2, pAG3, pBL1, and pHM1519.

26. (Allowed) An isolated DNA sequence encoding at least one protein selected from the group consisting of:

- i) a protein comprising the amino acid sequence of SEQ ID NO:2, and
- ii) a protein comprising the amino acid sequence of SEQ ID NO:3.

27. (Allowed) An isolated DNA sequence comprising SEQ ID NO:1.

28. (Allowed) An isolated DNA sequence encoding a protein comprising the amino acid sequence of SEQ ID NO:5.

29. (Allowed) An isolated DNA comprising SEQ ID NO:4.

30.-32. (Canceled).

33. (Previously Presented) The plasmid of claim 2, wherein the region encoding a protein involved in a biosynthetic pathway consists of a *lysC* gene of *C. glutamicum*

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encoding an aspartate kinase and a panD gene of *C. glutamicum* encoding an aspartate α -decarboxylase.